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AGENDA ITEM 7a

TO: MEMBERS OF THE INVESTMENT COMMITTEE

I. SUBJECT: Currency Overlay Managers Annual Review

II. PROGRAM: Currency Overlay

III. RECOMMENDATION: Renew annual contracts of CalPERS' currency overlay managers, Pareto Partners and State Street Global Advisors, for a period of one year. Wilshire Associates' opinion letter is shown in Attachment 1. Wilshire Associates' disclosure letter is shown in Attachment 2.

IV. ANALYSIS:

Recommendation Rationale:

The external managers of CalPERS' currency overlay program, Pareto Partners and State Street Global Advisors, have had a successful year, outperforming the benchmark set for the program. Therefore, Staff recommends renewal of their contracts for a period of one year.

Background:

The primary objective of CalPERS' currency overlay program is to provide risk control, or a reduction in the volatility of the returns of CalPERS' international equity investments. Return is a secondary consideration. These dual goals have created ambiguity in assessing manager performance as will be discussed later in this agenda item. The currency overlay program is mandated to overlay 25 percent of all CalPERS' international equity exposure.

On July 1, 1992, CalPERS initially funded Pareto Partners (Pareto). On June 12, 1996, after a subsequent Request for Proposal, CalPERS rehired Pareto and added State Street Global Advisors (SSgA), under one-year annual review contracts. Yearly reviews of the performance of the CalPERS' currency overlay managers will be completed with a recommendation to the Committee to either renew or not renew each contract. Note that contracts have provisions for termination on 30-days notice. As of September 30, 2007, Pareto overlaid approximately 10.1% or $4.17 billion and SSgA overlaid 6.4% or $2.6 billion of CalPERS' international equity assets.

Performance:

As the primary goal of the program is risk reduction, the managers are compared to a fully hedged benchmark. The benchmark is asymmetrical as managers can never be more than fully hedged; therefore maximum risk reduction may be achieved if managers do not take any positions away from the benchmark. As managers take positions away from the benchmark and reduce the hedge, they increase the risk of the portfolio, while at the same time allowing for possible alpha generation.

The hedged benchmark provides an indication of performance of a fully hedged position. The unhedged return represents a return opportunity at the other extreme. Together they may be thought of as the opportunity set for currency managers.

There are 2 basic environments, which present asymmetric opportunities for managers:

1) Foreign currencies weaken against the U.S. dollar. Managers can only hedge to 100%, thereby matching the benchmark.
2) Foreign currencies strengthen against the U.S. dollar. Managers can reduce hedges and generate alpha.

For this annual review period we were in environment 2, namely foreign currencies strengthened against the U.S. dollar. The managers correctly anticipated currencies' directions, reduced hedges and generated alpha. Therefore they did what was expected of active currency overlay managers.

There exist certain issues with performance measurement. These issues include a mismatch of time and a dual set of goals that are dependent upon the market environment. The currency overlay managers strive to generate alpha and reduce risk over an entire business cycle. However, their review covers a one year period. As mentioned earlier, the fully hedged benchmark makes managers' alpha opportunities asymmetric.

It is Staff's intention to realign the external program's benchmark so it will be symmetrical, as it is with the internal currency pilot program. A symmetrical benchmark will be better suited to a one-year review period and will make performance not dependent on the market environment, so that analysis will be unambiguous. It will be brought before the Policy Subcommittee in 2008.

This said, Table 1 shows each manager's information and Sharpe ratios using average monthly return data for the previous 3- and 5-year periods (note, one year information ratios were not provided as they do not capture meaningful comparisons). Due to the asymmetrical benchmark, information and Sharpe ratio analysis is less informative compared to other programs that have symmetrical benchmarks.

Table 1

Manager	3 year average information ratio	3 year average Sharpe ratio	5 year average information ratio	5 year average Sharpe ratio
Pareto Partners	-0.12	-0.12	0.394	0.399
SSgA	0.287	0.283	0.354	0.348

Source: State Street Bank and CalPERS

Based on the ratios in Table 1, Pareto Partners have over the longer period had the slightly better performance of the two managers as seen in the 5-year performance results. However in the most recent years, SSgA has outperformed Pareto Partners.

<u>Pareto Partners:</u>

Pareto's risk control strategy attempts to capture 60% of any available upside from currency gains during periods when the U.S. dollar is decreasing in value relative to other currencies, while limiting any losses to three percent below the fully hedged benchmark during periods of U.S. dollar strength. This is accomplished by employing a defensive strategy designed to forecast the risk of loss through currency risk modeling.

Over the twelve-month period ending September 30, 2007, Pareto has outperformed the fully hedged benchmark (i.e. the actual currency exposure of the underlying equity portfolio, fully hedged) by 0.94%, returning 2.84% versus 1.90% for the benchmark. Over this same period, unhedged currencies returned 10.73%. Thus Pareto's performance exceeded the hedged benchmark, though it did not meet their objective of capturing 60% of the upside.

Since inception in July 1992, Pareto has outperformed both the fully hedged benchmark and the unhedged return. It has exceeded the fully hedged benchmark by 9.80% on a cumulative basis, returning 18.94% versus the benchmark return of 9.14%. Over this same period, unhedged currencies returned 16.61%. These are good results given that the period included stretches of appreciation as well as depreciation of dollar, and the managers can only generate alpha when the dollar is depreciating versus foreign currencies due to the asymmetric nature of the benchmark.

Pareto's performance is detailed in Table 2. The shaded rows in the table with positive unhedged currency return correspond to multi-year periods of foreign currency strengthening vs. the US dollar. In those periods, the manager has had the opportunity to generate alpha. Pareto generated alpha in all three of those periods, and captured close to 60% of the potential upside on one occasion.

Table 2

Period	Pareto's Return	Fully Hedged Benchmark	Unhedged Currency Return
18 months ending 9/93	-1.51%	-3.58%	-0.39%
Year ending 9/94	1.36%	-0.37%	6.46%
Year ending 9/95	5.68%	1.33%	3.47%
Year ending 9/96	-0.17%	1.67%	-6.16%
Year ending 9/97	0.05%	1.65%	-7.00%
Year ending 9/98	0.26%	1.25%	-0.24%
Year ending 9/99	0.19%	1.71%	-0.08%
Year ending 9/00	-0.38%	2.55%	-11.10%
Year ending 9/01	0.66%	1.08%	-1.07%
Year ending 9/02	4.81%	-0.81%	5.54%
Year ending 9/03	1.56%	-1.04%	12.32%
Year ending 9/04	1.39%	-0.96%	5.89%
Year ending 9/05	-0.34%	0.39%	-1.45%
Year ending 9/06	1.35%	2.20%	2.39%
Year ending 9/07	2.84%	1.90%	10.73%
Cumulative from inception	18.94%	9.14%	16.61%

Source: State Street Bank and CalPERS

<u>SSgA:</u>

Similar to Pareto, SSgA employs a risk control strategy designed to capture 60% of any available upside due to currency gains during positive return periods, while limiting any losses to three percent below the fully hedged benchmark during negative return periods. Their market philosophy incorporates fundamentals, long term valuations and technical analysis. SSgA's approach helps to diversify the portfolio due to the fact that their approach to currency overlay is different from Pareto's.

Over the twelve-month period ending September 30, 2007, SSgA outperformed the fully hedged benchmark by 2.33%. SSgA returned 4.23% versus 1.90% for the fully hedged benchmark. On an unhedged basis the currency return was 10.73% over the same period. Thus SSgA's performance exceeded the hedged benchmark, although it did not meet their objective of capturing 60% of the upside.

SSgA's performance is detailed in Table 3. It too encompasses periods of both dollar strength and dollar weakness. The shaded rows in the table with positive unhedged currency return correspond to periods of foreign currency strengthening vs. the US dollar. In those years, the manager has had the opportunity to generate alpha. SSgA generated alpha in both periods, but the alpha was below the program target of capturing 60% of the potential upside.

Table 3

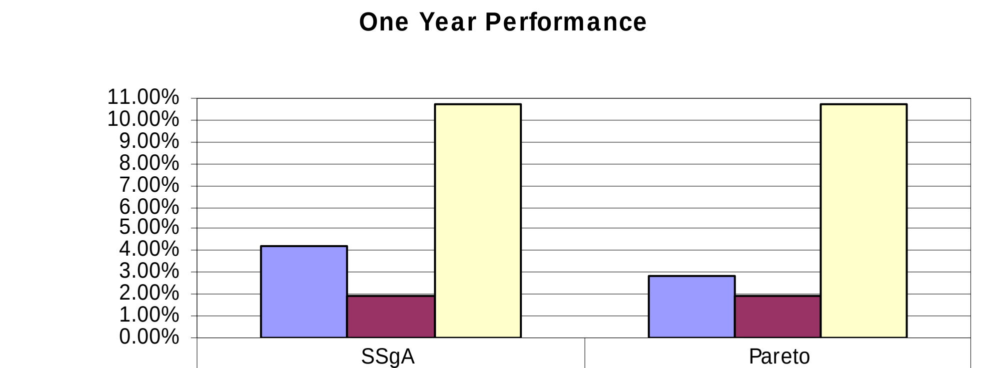
Period	SSgA's Return	Fully Hedged Benchmark	Unhedged Currency Return
Year ending 9/97	0.48%	1.65%	-7.00%
Year ending 9/98	-1.24%	1.25%	-0.24%
Year ending 9/99	3.42%	1.71%	-0.08%
Year ending 9/00	-1.68%	2.55%	-11.10%
Year ending 9/01	2.26%	1.08%	-1.07%
Year ending 9/02	1.38%	-0.81%	5.54%
Year ending 9/03	1.23%	-1.04%	12.32%
Year ending 9/04	-1.54%	-0.96%	5.89%
Year ending 9/05	-0.57%	0.39%	-1.45%
Year ending 9/06	2.42%	2.20%	2.39%
Year ending 9/07	4.23%	1.90%	10.73%
Cumulative from inception	10.60%	10.28%	13.89%

Source: State Street Bank and CalPERS

Since inception in October 1996, SSgA has outperformed the fully hedged benchmark by 0.32% on a cumulative basis, returning 10.6% versus 10.28% for the fully hedged benchmark. During this same time period, the unhedged benchmark currency return has been 13.89%. Pareto's alpha results since inception were better, but note that SSgA has a different inception date than Pareto Partners.

<u>Comparative Performance of Managers</u>

The graph and table below summarize performance for the currency overlay managers for the year ending September 30, 2007.

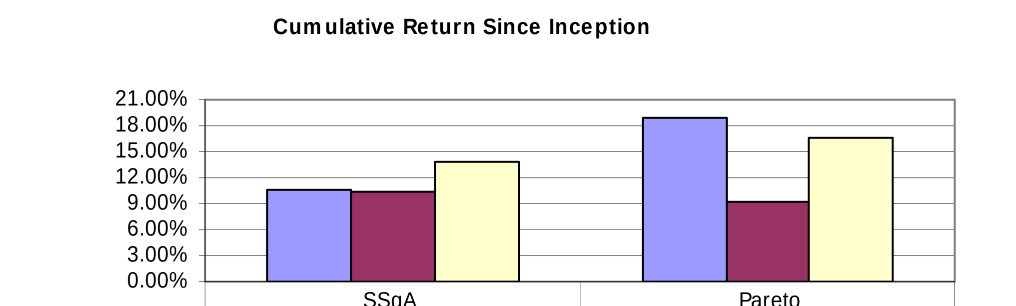


	SSgA	Pareto
Manager	4.23%	2.84%
Fully Hedged	1.90%	1.90%
Unhedged	10.73%	10.73%

Source: State Street Bank and CalPERS

As seen in the graph above, both managers outperformed the fully hedged benchmark during the review period, and their performance fell within the bounds of hedged and unhedged returns.

The following graph and table illustrate the performance since inception for each manager.



	SSgA	Pareto
Manager	10.60%	18.94%
Fully Hedged	10.28%	9.14%
Unhedged	13.89%	16.61%

Source: State Street Bank and CalPERS

Since inception, both managers have outperformed the fully hedged benchmark on a cumulative basis. While SSgA's performance fell within the bounds of

hedged and unhedged returns, Pareto Partners outperformed both measures since inception.

Staff recommends that the Investment Committee renew Pareto Partners and SSgA's contracts for a period of one year.

V. STRATEGIC PLAN:

Monitoring and review of the External Currency Overlay Program is consistent with Goal VIII: Manage the risk and volatility of assets and liabilities to ensure sufficient funds are available, first, to pay benefits and second, to minimize and stabilize contributions.

VI. RESULTS/COSTS:

The only costs associated with CalPERS' external currency overlay program are the manager fees and staff time to monitor the managers. Returns shown in the agenda item are net of the managers' fees.

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